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SkyREPORT

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SkyREPORT

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Volume 1; Number 1

Money Talks ... as home satellites lead the TV revolution onto the info hiway future ...

"The home satellite industry," says Richard Bilotti, Jr. at Grantchester Securities, "has been a real backwater" as far as top communications analysts are concerned.

And no wonder. A relatively small industry, dominated by private companies — and shadowed by such spectacular failures as **United Satellite Communications** in Indiana and **SkyPIX** in bankruptcy and other courts — is not of the stuff that stock market dreams are made.

But wait, look up in the sky again.

According to Bilotti and several other analysts, the less-than-exciting outlook above could easily change with the industry moving into a strong portfolio position in 1994 and the years beyond.

Says Mark Stahlman of **New Media Associates**, "The event that most people are keyed into is the (now successful) **Hughes** launch and the expectation that there will be a DBS industry." With compression allowing for greatly increased numbers of channels and the expectation of dropping prices, he says, "we'll have a whole new ball game."

The ball game appears to be not only that of home satellite purveyors drawing from rural and underserved suburban markets but also moving into direct competition with the cable industry.

[A word about acronyms and yesterday v. tomorrow ... the overall term for the industry, be it C-band, C/Ku-band or the new high-powered Ku-band, is -- as generally used -- **DTH**, or **D**irect **T**o (the TV) **H**ome; the industry as it might work in the future via high-powered Ku-band satellites might best be known by the acronym **DBS**, or **D**irect-**B**roadcast **S**atellite. Just thought you'd like to know; and DBS doesn't mean *Don't Be Silly* anymore.]

At **Prudential Securities**, **Melissa Cook**, author of an August '93 report on **Tele-Communications, Inc.** (symbol: **TCOMA**) and **DirectTV** (**GM's Hughes Divison**, symbol: **GMH**), remarks, "The real question was whether satellite could be a competitor to cable. Our conclusion is that it certainly can be."

(Of course not all analysts share this — or any other — rosy view of DTH. For example, **Jessica Reif** at **Oppenheimer** believes that in the U.S. the business faces a "very long haul" and **John Field** at **Hanifen Imhoff** said the subject was not in his field of interest. Nevertheless **Rob Hubbard** at **United States Satellite Broadcasting** (**Hubbard Broadcasting**; privately held) notes analysts who have made their living with the cable industry, "don't want to jeopardize their bread and butter.")

But back to the main issue: The potential of a DBS/cable shoot-out. Analysts who believe direct broadcast could be a definite play in the future cite several reasons for their beliefs but primary among these is the time factor. Namely: DirectTV and USSB will offer their 150 channels of pay-per-view, 'essentials' programming and premiums by this Spring — while most cable systems will be mired in the 35 to 60 channel capacity range until well into later this decade, perhaps beyond. And to add further cable injury to insult, C-band *already* offers viewers some 250 channels while the already-existing DBS

service PrimeStar plans to offer some 70 channels by mid-1994.

To use this advantage to best effect, Bilotti suggests that the DTH entrants use the MCI, or long distance, model of competition. DTH companies he says, "Should really look at MCI's historical strategies against AT&T." The upstart telephone company, he explains, "started out with about a 30% discount from AT&T (prices)." Over time, of course, that price difference flattened but in the meantime MCI gained equal access to local telephone connections/lines and had begun to chew away pieces of AT&T's long-held monopoly.

Whether DirecTV and USSB can pull off a similar coup remains to be seen and in our next issue we'll take a closer look at industry balance sheets with charts and commentary on ***The Multi-Billion-Dollar Bet***.

A Billion and a Half and Counting Home Satellite Gross Income in 1993

New Systems	\$888,000,000
Programming Subscriptions	440,581,000
Pay-Per-View	81,834,000
Total	\$1,410,415,000

Sources: Figures calculated from General Instrument, SBCA, and
Bruckin/Golding data.

Dishing It Down

C-band dishes, which can range in size from 5 to 10 feet, now carry some 275 channels of diverse programming.

3 to 4 foot, medium-powered Ku-band dishes will soon carry more than 70 channels of programming via PrimeStar.

At 1 to 2 feet, DirecTV and USSB dishes will offer some 150 channels by mid-1994.



SkyTRENDS

A project of the **Satellite Broadcasting and Communications Association**
in conjunction with

MEDIA BUSINESS CORP

SBCA President: Chuck Hewitt

SBCA Project Chairman: Scott Weiss, Turner Home Satellite, Executive VP and GM

Project Managing Director: Evie Haskell

SkyREPORT

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1786 PLATTE STREET — DENVER, COLORADO 80202 — TELEPHONE: 303 / 964 - 8400 — FAX: 303 / 964 - 8405

PUBLISHER: PAUL MAXWELL — EDITOR: EVIE HASKELL — ASSISTANT EDITORS: STACEY O'ROURKE AND GAIL COLBERT

FOR SUBSCRIPTION INFORMATION CALL GINA RAYNE AT 303/964-8400

SkyREPORT is a monthly newsletter produced by MEDIA BUSINESS CORP for the Satellite Broadcasting and Communications Association's **SkyTRENDS** project. The newsletter seeks to provide up-to-date business trend and statistical information for the financial community, members of the home satellite industry and all others interested in this business.

We would like to hear your comments and suggestions and would deeply appreciate any reports, data or other information that you might be willing to share. Confidentiality is guaranteed where requested.

High-Powered Ku-Band Service (DBS) -- Return on Combined Distribution System and CPE (Customer Premises Equipment Included in Total Investment)

	1994	1995	1996	1997	1998	1999	2000
Homes Passed by DBS FTTC System	19,410,000	19,670,00	19,930,00	20,200,000	20,470,000	20,740,0004	21,010,000
DBS System subscribers	0	1,339,280	2,535,150	3,315,072	4,111,794	4,889,027	5,622,191
Average Subs		669,640	1,937,215	2,925,111	3,713,433	4,500,410	5,255,609
Capital Expend - Distrib. Systems		1000.0	0.0	0.0	0.0	0.0	0.0
Capital Expend - CPE		1138.4	929.8	555.0	519.3	464.2	401.6
Capital Expend - Ttl		2138.4	929.8	555.0	519.3	464.2	401.6
Total Cum. Invest - Distrib Systems		1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Total Cum Invest - CPE		1138.4	2068.2	2623.2	3142.4	3606.7	4008.3
Total Cum Invest - Ttl		2138.4	3068.2	3623.2	4142.4	4606.7	5008.3
Monthly Subscription rev. per sub		30.00	30.90	31.83	32.78	33.77	34.78
Mo'ty Variable Subscription costs per sub		9.99	10.29	10.60	10.92	11.24	11.58
Mo'ty PPV rev per sub		4.13	8.50	13.13	13.52	13.93	14.35
Mo'ty Variable PPV costs per sub		2.48	5.10	7.88	8.11	8.36	8.61
Annual Sub revenue		241.1	718.3	1117.2	1460.8	1823.5	2193.4
Annual PPV revenue		33.1	197.5	460.8	602.6	752.2	904.8
Ann. Variable Sub costs		80.3	239.2	372.0	486.4	607.2	730.4
Ann. Fixed Sub over-costs		208.1	276.2	344.2	397.8	459.7	531.2
Annual Variable PPV costs		19.9	118.5	276.5	361.5	451.3	542.9
Ann. Sub. Cash flow		-47.3	203.0	401.0	576.6	756.6	931.7
Annual PPV Cash flow		13.3	79.0	184.3	241.0	300.9	361.9
Total cash flow		-34.1	282.0	585.3	817.6	1057.5	1293.6
Depreciation - 8 & 10 yrs rate		121.1	300.4	393.2	460.4	521.8	575.9
Operating Income		-155.2	-18.4	192.1	357.3	535.6	717.7
Average Ttl Invest.		1069.2	2603.3	3345.7	3882.8	4374.6	4807.5
Pre-Tax Cash Return on investment		-3.2%	10.8%	17.5%	21.1%	24.2%	26.9%
Pre-Tax Op. Inc. return on invest.		-14.5%	-0.7%	5.7%	9.2%	12.2%	14.9%

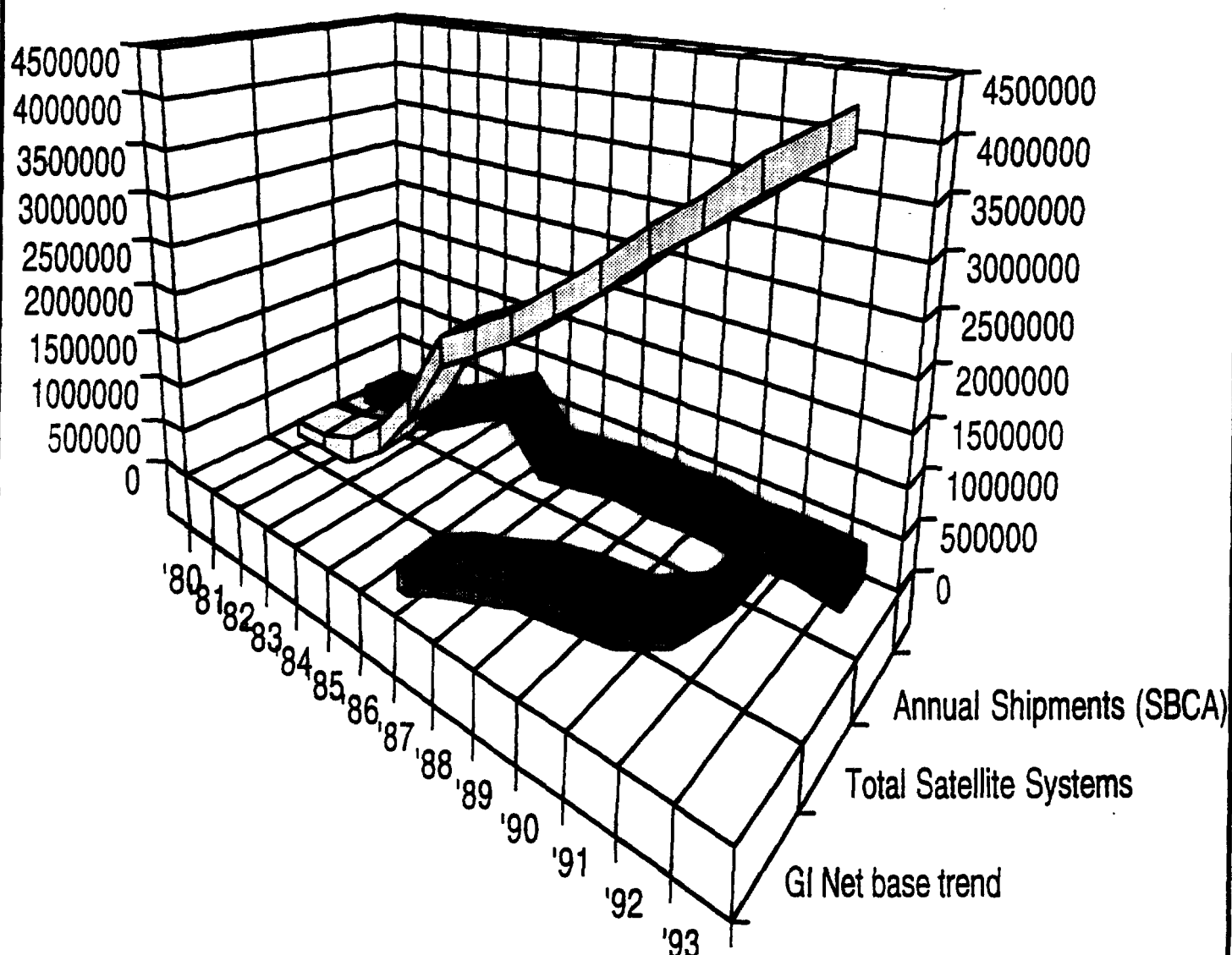
Estimates from Grantchester Securities and Wasserstein Perella Securities Report on The Cable Television Industry: New Technologies, New Opportunities and New Competition, March 1993.

PEAKS & VALLEYS

Home Satellite's Upward Trek

The home satellite industry got its start back in 1976 when Stanford Professor *H. Taylor Howard* gathered up discarded equipment from his local telephone company, pounded out a 15-foot parabola dish — and discovered that he could pick up **Home Box Office** (HBO, now a part of **Time Warner**; symbol: **TWX**) signals.

Satellite System Trends



At that time, the signals were created for and aimed at local cable television operators who would, in turn, distribute them to a new kind of TV subscriber — the premium cable customer. Howard tried to notify **Time, Inc.** (HBO's then-parent) of his discovery but when he got no reply, he began selling booklets on how to construct backyard systems that would allow television viewers to get HBO for themselves.

Thus started an entrepreneurial adventure that in the last 19 years has encountered enough ups and downs to make even the most risk-oriented business leader woozy. As the chart on the accompanying page shows, the nascent industry stumbled looking for a *raison d'être* a year or two and then took off so that by the end of 1985 approximately just over 1.7 million satellite systems dotted the U.S. — with their viewers happily receiving cable premium and, later, so-called basic cable channels for nothing more than the initial cost of their systems.

Predictably, premium channel owners such as **Time** and **Viacom** (the owner of **Showtime**, symbol: **VIA**) tired of this scenario. And in mid-1986 Time did the unthinkable: The company scrambled HBO so that only those willing to pay monthly fees could get the service. Rightly, they thought the copyright holder should be compensated ... and, after all, they had to quiet the rumblings from cable subscribers who paid programming fees and cable companies who sent the money to programmers while home satellite systems owners snagged the channels for free.

The results were immediate as the industry took a dive that resembled nothing so much as the first bomb hitting Pearl Harbor. From a record 735,000 satellite systems shipped in 1985, the total dropped to 227,500 in 1986 — a plunge of nearly 70 percent.

As a result, hundreds of dealers landed in bankruptcy while equipment makers and distributors slashed their work forces and sales ground to a near halt. As other premium channels followed HBO's example, pundits took to pontificating on the death of the industry.

But as Mark Twain once remarked on his own behalf, the obituary notices were premature. After a brief struggle over encryption technologies, **General Instrument** (symbol: **GIC**) emerged as the clear winner in the home satellite subscription game (and cable head-end encryption fight), program packagers popped up with various schemes for selling programming and some home satellite owners proved willing to buy their favorite channels (while thousands of others turned 'pirate'. For more information see **Pirates Go Legit**, p. 7).

Thus by 1988, the industry was on the mend with an estimated 320,000 to 345,000 systems sold — a number which has slowly but steadily risen every year since.

After solid growth through 1993 (an estimated 330,000 to 390,000 systems sold) the home satellite industry has emerged with some \$1.449 billion in gross income (see chart on p. 2). The business now boasts of some 3.5 to 4 million systems in place across the United States nearly half of which receive subscription programming to the tune of an average \$288 per year.

Industry observers offer several reasons for this recent boom, including:

- The improvement in the nation's economy;
- Steadily falling prices for home satellite equipment (the average price for a complete set-up has fallen from \$10,000 in the early 80's to approximately \$2,500 today.)
- The return of 'pirates' to the fold (see story on p. 7); plus
- The excitement over Ku-Band DBS.

It is the latter, in fact, which many observers feel will power the entire home satellite industry to new heights in '94 and beyond.

While many at first thought that the coming reality of DBS would hold down the traditional C-band business (where dishes of 5- to 10-feet are needed to capture the signals) it seems to have had the opposite effect, pulling more and more customers into dealers' showrooms. What's more, recent figures show that some 66 percent of home satellite owners live in areas passed by cable — and as **Money Talks ... About Home Satellite** on pages 1-3 noted, some observers are betting that DBS could give cable a run for its money in the latter half of this decade.

Today's Customers ... and Tomorrow's?

Richer, older, better educated, more rural and most likely to live in the nation's North Central or Southern areas: As the accompanying profile reveals, that's the standard picture of today's home satellite customer.

With the advent of high-power Ku-band services, however, the industry is changing and one major question (yet to be answered, stay tuned) is whether the **DirecTv**, **USSB** and **PrimeStar** services will alter this profile significantly -- and perhaps even move into customer bases traditionally considered cable's very own.

Today's DBS players are widely divided on the subject. Perhaps at no surprise, at PrimeStar, an existing service owned largely by cable companies, a company spokesman comments, "It's obvious to us that our major opportunity is where cable is not" -- in other words, the non-cabled "C" and "D" counties traditionally served by home satellite. However, PrimeStar may soon move into cabled areas if, as some observers believe, cable and home satellite evolve into separate services with the former providing interactive capabilities while home satellite concentrates on one-way programming.

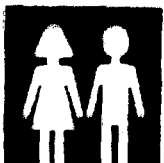
At **GM/Hughes'** DirecTv, spokesperson *Tom Bracken*, sees a somewhat different picture.



Who Buys? The Rich Vein of Current C/Ku-Band Viewers



89 % of home satellite owners have a high school education compared to the national average of **76%**. The average age of a satellite system owner is **49.3 years**



61% do not have children. **94%** own their own home. Their average income is **\$43,500** versus a national average of **\$36,300**.



38 % live in the North Central part of the country and **37%** in the south. **64%** of satellite system owners live in rural areas.



When asked their reason for purchasing a system **50%** said programming variety as a key reason **36%** said cable was not available or was too expensive. **78%** of the home satellite owners are satisfied with their service.

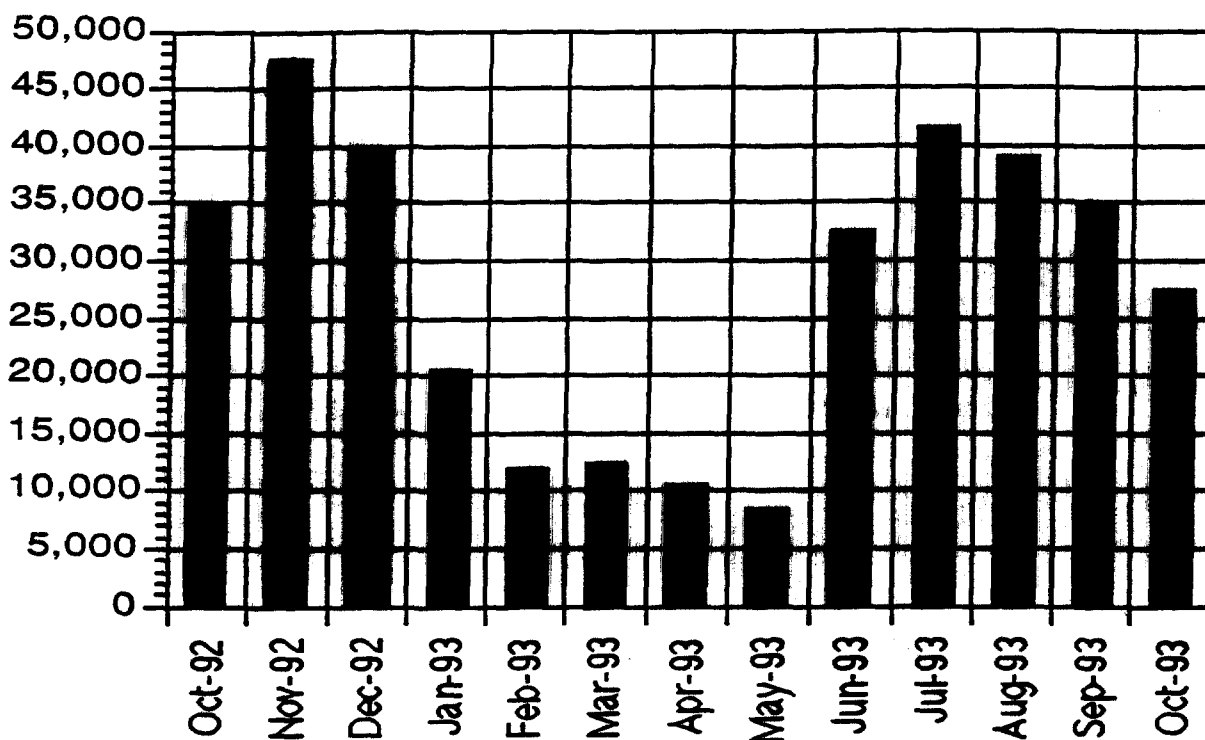
"Initially," he says, "our competitive set will skew to the rural market place." As equipment prices drop, however, Bracken believes this may change. Significantly lower costs for equipment (an expected drop from \$699 to \$899 plus installation in '94 and '95 to price tags of only several hundred dollars when RCA/Thomson's exclusivity contract runs out after 18 months or one million systems sold), lower subscription costs, the ease of moving the equipment, plus a promised "excellent" customer service set up, Bracken says, will all serve to lure the large pool of dissatisfied urban and suburban cable customers into the DTH fold.

On the far side of the spectrum, USSB Vice President *Rob Hubbard* expects his service to appeal to cable customers from day one. "Our research shows that our customers will predominately be blue-collar families whose primary entertainment expense is in the home TV," he remarks, "and sixty-some percent of these people live in cabled areas." Indeed, they do.

Data From Bruskin/Goldring.

Pirates Go Legit!?!?

Number of Consumers Converting to Paid:

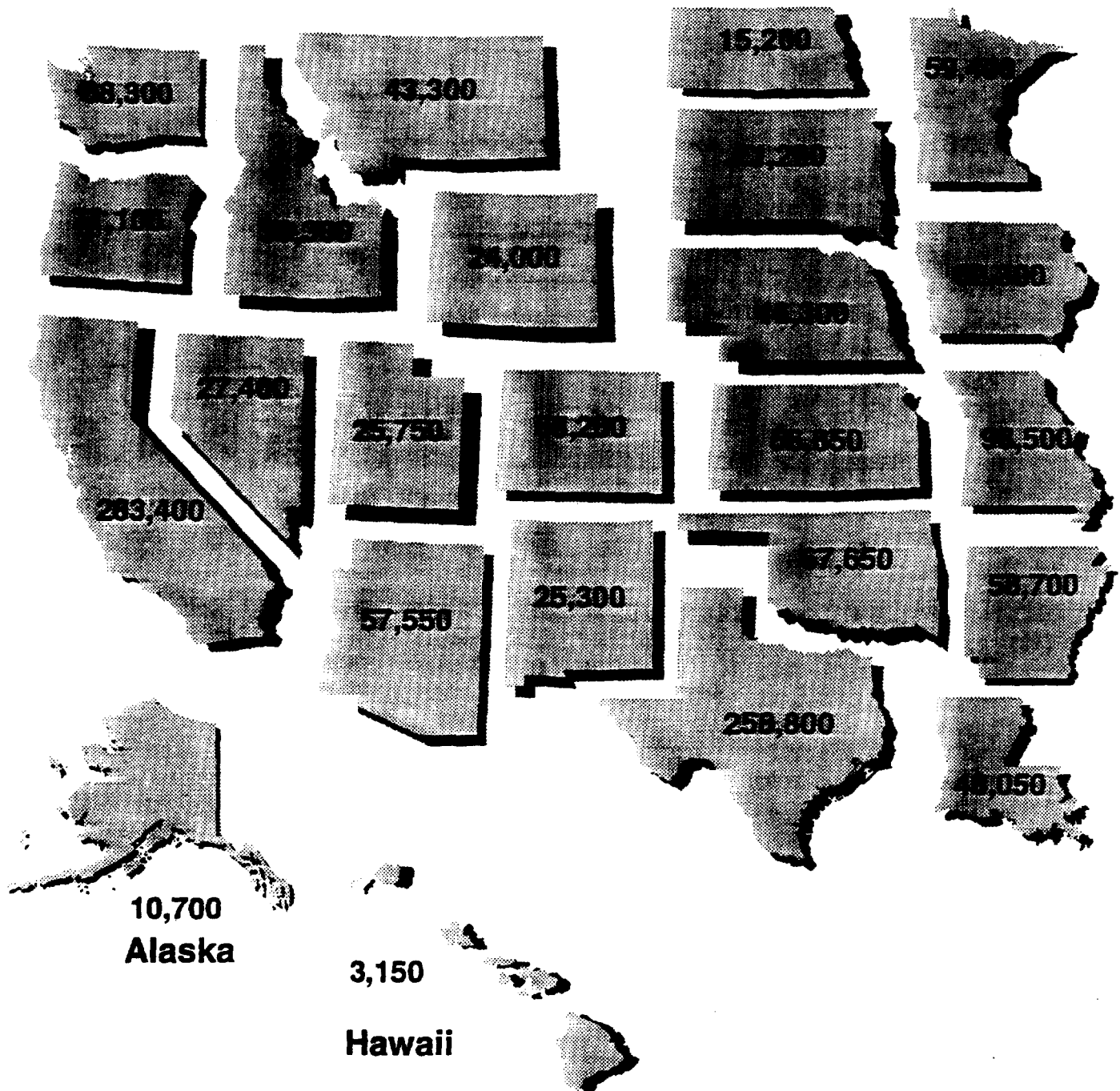


As this chart illustrates, nearly 362,000 former pirates came into the home satellite subscription-service fold in the first 10 months of 1993. Equal, or even greater numbers, are expected to go legit in '94 and '95 — and these estimates are considered by many to be on the low side. Since the beginnings of encryption in mid-1986, pirate dealers — who steal encoded programming via 'chipped' modules which they then sell to unsuspecting or unsuspecting customers — have posed an enormous problem for the home satellite industry. (As, indeed, piracy has posed a problem for dozens of businesses, including the cable and computer industries.)

The pirates systematically broke through several versions of VideoCipher II boxes which were used to deliver paid-for programming to the home viewer. In fact, before the introduction of GI's still unbroken VCII+ model in February 1990 some sources estimated that pirates accounted for some 40 percent of subscription program viewing among home satellite system owners. (Something some so-called "basic" programmers didn't mind as higher ratings are, after all, higher ratings.)

With the introduction of the VCII+ models (and, more recently, the VCRS) the numbers of ex-pirates who suddenly decided they were willing to pay for their programming soared, reaching a peak of nearly 48,000 in November of 1992. At the start of 1993, however, pirates shifted strategies (as they always will, piracy is forever an on-going battle, but one worth waging and winning) and began using chipped commercial VCII data streams to create their wares — and, as the chart shows, percentages of new authorizations fell dramatically. By pring of 1993, however, GI had found ways to secure the VCII commercial data stream and droves of former pirates again scurried to reputable satellite dealers. The dip in pirate-authorizations from July through October is attributed to a shortage of VCII+ and VCRS modules. But by December GI had some 75,000 to 78,000 new authorizations -- some more than half of which are attributed to the demise of piracy. By all accounts, '94, '95 and perhaps beyond will see similar figures.

Where They Live...



NOTE: Estimates of satellite systems are based on data received from General Instrument Corporation and A Presentation of Findings Among The Home Satellite Dish Owner, prepared by Bruskin/Goldring Research for the S.B.C.A.



How many home satellite systems can be found in North America? No one really knows — and estimates range from 3.5 to nearly 4.5 million. (Such a spread is not uncommon in this still — but soon to change — predominately private industry.) However, based on data received from **Bruskin/Goldring Research** and **General Instrument Corporation**, **SkyREPORT** estimates some 3.7 million home satellite systems now operating in the United States and Canada. Of these nearly 21 percent can be found in the three states of California, Texas and Florida. (Rural folks, older folks and the forever astonishing citizenry of California are obviously big on this home entertainment form.) As **USSB** and **DirecTV** join **PrimeStar** in the DTH picture, will this profile change? As they say, Stay tuned for the latest direct-to-home info coming soon in **SkyREPORT**.

Why Do People Buy?

Two Guesses

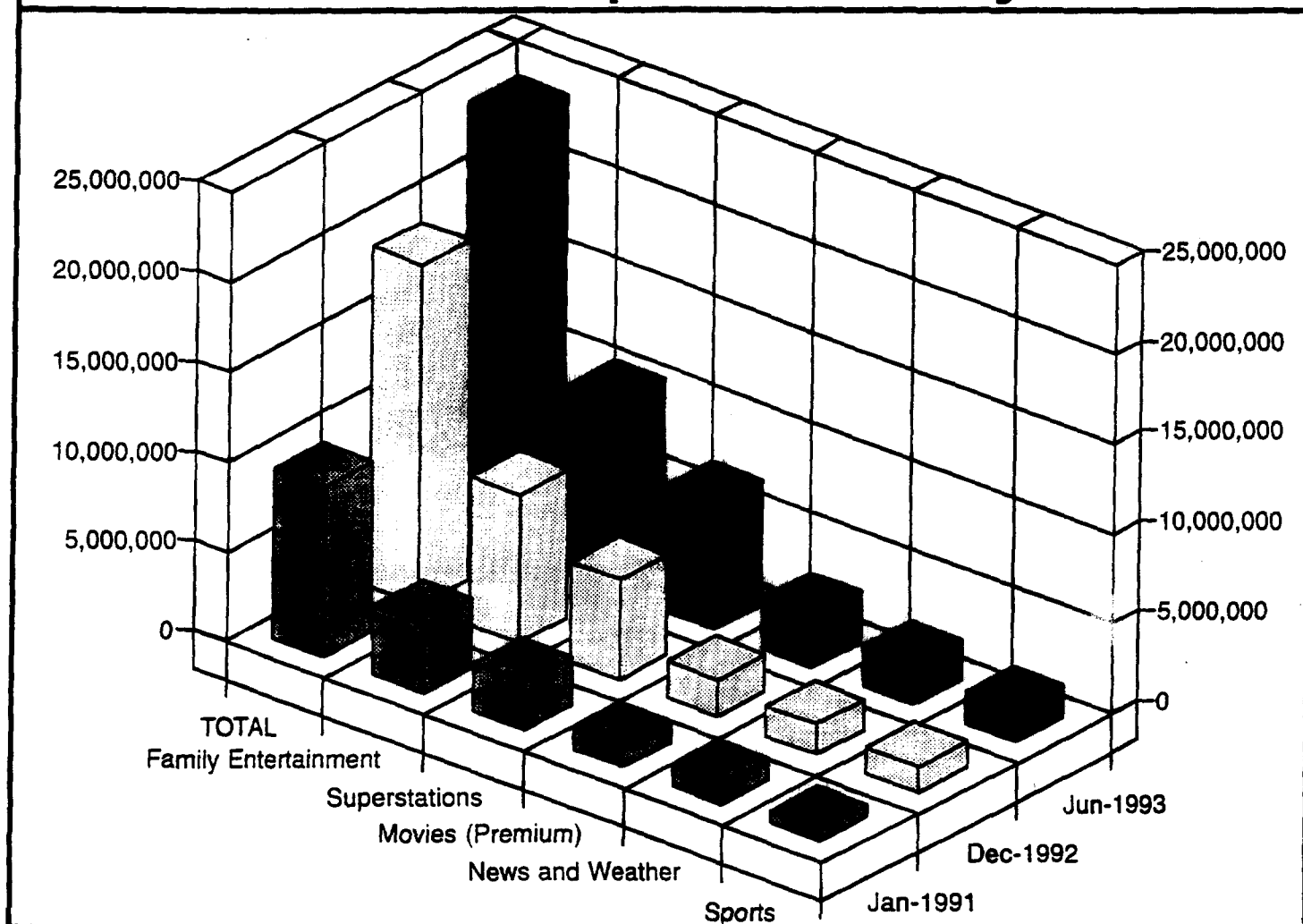
(& The First Two Don't Count)

Why have more than 3.5 (or 4.5 depending on whose statistics you're using) million people across the United States been willing to shell out anywhere from \$10,000 (1980's prices) to \$2,500 (1993's prices) for a home satellite system?

Programming, programming and more programming ... the incredible, sometimes unbelievable and always variable array of entertainment and information available through the big (and now small) home dishes. With DTH system, viewers have some 75 in-the-clear video channels, 75 audio services plus more than 100 subscription channels to chose from. At any given moment viewers could well have access to newscasts from Russia, sumo wrestling from Japan, Disney movies, Guns 'n Roses concerts, demonstrations in Afghanistan, a three hundred and fifty ninth rerun of *I Love Lucy*, the latest video from....

But you get the idea. Those dishes aimed at the sky bring in plenty. In fact, 50 percent

GI Subscription Analysis



of the home satellite viewers interviewed by Bruskin/Goldring Research cited 'More Programming Variety' as their key reason for buying a satellite TV system. (In second place, with a 36 percent mention, was 'Cable not available/Rates too high/Poor Service.')

Liking the programming, however, does not necessarily translate to a willingness to pay monthly fees for it. In one of its more startling findings, Bruskin/Goldring reported that 58 percent of those interviewed did not buy subscription programming. (A statistic which is likely to soon tilt in the other direction, however.

General Instrument figures indicate that today only 2.5 percent of new system purchasers do not also subscribe to programming and DBS services, of course, require programming payments.)

Still, for those who choose not to shell out on a monthly basis, there remains plenty to watch. As the chart on this page reveals, non-subscribers can select from dozens of occasional feeds plus Court TV, C-SPAN, E! Entertainment, Fox, Home Shopping, Mind Extension University, The Nostalgia Channel, PBS, Tokyo Broadcasting, The Travel Channel, Warner Brothers

For those willing to pay for their programming, the choice is (what else?) a good deal broader. As the chart opposite shows, today's subscription customers can choose among Premium services, Sports channels, Superstations and Networks, News and Weather offerings plus Family Entertainment. Of these, Premium Channels (including Showtime, The Movie Channel, HBO, Cinemax, Playboy, Spice, First Choice, Encore and Flix) enjoyed the greatest growth in the first six months of 1993, growing by 36 percent from 2,078,473 subscriptions in December 1992 to 2,825,119 subscriptions by June of 1993.

Second in the high-growth category were News and Weather channels which ballooned by 34% from 1,668,429 subscribers in December '92 to 2,242,304 in June '93.

In the Clear: (Some of the) Channels You Can Watch for "FREE"!

3 Angels Broadcasting
 Able Communications
 Access America
 Black Entertainment
 The Box
 C-SPAN 1 & 2
 Canadian Home Shop
 Canal de Noticias
 Caribbean Satellite
 CBC (French)
 CBC North
 CBC Parliamentary
 Channel America
 CNBC
 CNN International
 Collectors Clubhouse
 Court TV
 C-SPAN.
 Deutsche Welle
 E! Entertainment
 ECO
 Galavision
 Eternal World TV Net
 Fox
 Global TV
 Home Shopping I & II
 Hughes Television Net.
 Keystone Inspirational
 The Learning Channel
 Mind Extension Univ.
 Much Music
 NASA Select Channel

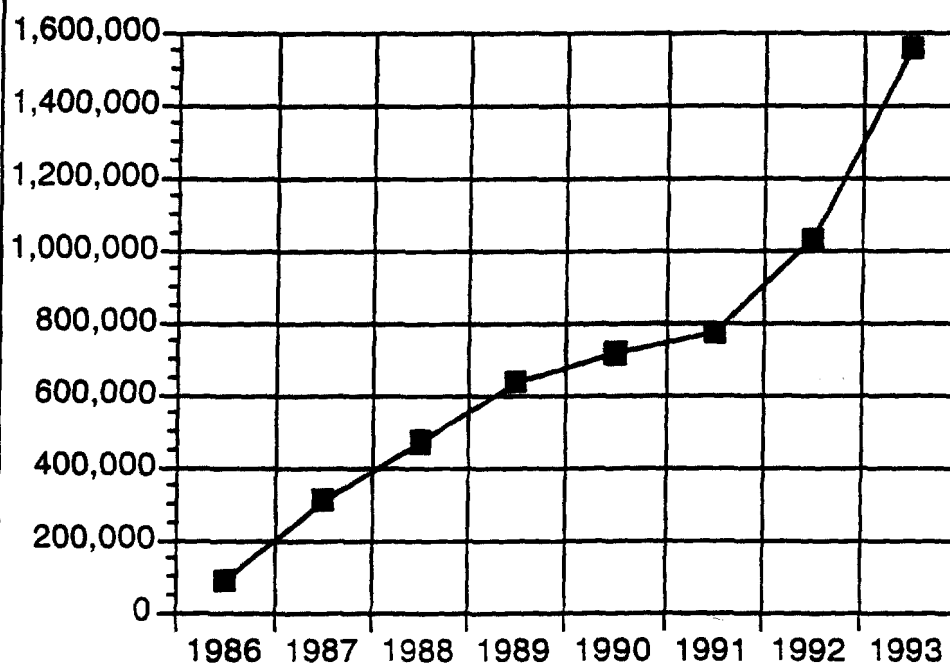
Nat'l Christian Network
 NETV Nebraska PBS
 NHK (Tokyo)
 The Nostalgia Channel
 Oklahoma State
 PBS
 QVC Network
 (Oral) Roberts
 Satellite Market USA
 Sci-Fi Channel
 SCOLA (multinational)
 Shop-At-Home
 SkyStore
 SkyVision
 Telemundo (Spanish)
 The Travel Channel
 TLN Network
 TV5 Montreal
 TVN Promotional
 Univision (Spanish)
 ValueVision
 Video Catalog Channel
 Video Tape Co.
 Virginia State Ed Net.
 Virginia Tech University
 Voice of America
 US Land Exchange
 Warner Brothers
 The Weather Network
 WorldNet
 VOA
 And Many Many More

Why Wait for 500?

Or, How Home Satellite Beats the "Tele-Cables" At Their Own 500-Channel Game

Ever heard the cable guys and their partner/owner/suitor telcos beat their chests on the soon-to-come (read 1997, '98 or even later) 500 channels they plan to wire into everybody's house via fiber optic?

C-Band Subscriptions in the 90s



Some of the programming: Sunshine Network, KWGN - Denver, Showtime, Request TV, FLIX, Disney Channel, Playboy TV, Cable News Network (CNN), Superstation TBS, WGN - Chicago, Home Box Office (HBO), Family Channel, Discovery Channel, TVN 1 PPV, CNBC, Cinemax, TNT, The Nashville Network, USA Network, CNN Headline News, Spice, Arts and Entertainment, Family Channel, Viewer's Choice, Lifetime, Prime Network, Weather Channel, Midwest Sports Channel, NESN, MTV, Nickelodean, Comedy Central, New Sport, Action PPV, Encore 1, All News Channel, Cartoon Network, FLIX, American Movie Classics, MSGN, Bravo, RAI-USA (occasional), WWOR - New York, Request TV, Video Hits One, CMTV, KUSA - Denver, KRMA - Denver, Sports Channel, KMGH - Denver, Prime Ticket, Home Sports Entertainment, SportsChannel - Chicago, KCNC - Denver, SportsChannel - Ohio, International Channel, Prime Sports Northwest, KBL Sports, WRAL - Raleigh, WABC - New York, WXIA - Atlanta, Sports Channel - Pennsylvania, SportsChannel - New York, SportsChannel - New England, WSBK - Boston, KTVT - Dallas/Fort Worth, WPIX - New York, KTAL Los Angeles, SportsSouth, Home Team Hits, Empire Sports Network, RTP, TV Asia, Antenna Greece ... Data from GI

Guess what gang ... those 500 channels are upon us, in the sky and growing every day.

(Surprise, surprise) we're talking about home satellite and the hundreds of channels that are available now plus the hundreds more that will be up and running by the end of this year. The chart on this page shows some of the subscription services already viewed by C-band and C/Ku-band home satellite system owners. Currently these number some 275 channels plus dozens upon dozens of occasional feeds, business feeds etc.

With many new programming entrants eyeing the DTH pie -- and DBS services entering the fray with an expected 50-odd new channels for PrimeStar and 150 for USSB/DireTv (most of which will also be available via C and C/Ku-band) -- plus the increasing numbers of interactive and data ser-

vices available via satellite -- well, the cable-cos are already left in the dust as far as futuristic capabilities are concerned.

In other words, by the end of this year, the home satellite industry will easily surpass cable's dreams for the end of the decade -- and the much-vaunted plethora of choices will come from the sky, not cables buried in the ground.

Market Place

Some of the Public Companies in the Sky

<u>COMPANY</u>	<u>Symbol</u>	<u>Exchange</u>	<u>1/4/93 Close</u>	<u>12/31/93 Close</u>
AT&T	T	NYSE	50.75	52.50
AVNET	AVT	NYSE	33.875	39.00
Cablevision	CVC	ASE	35.125	67.875
CA Amplifier	CAMP	NASDAQ	6.50	8.875
Cap Cities/ABC	CCB	NYSE	499.00	619.50
Disney	DIS	NYSE	42.75	42.625
Family	FAM	NASDAQ	14.25	20.75
GE	GE	NYSE	85.50	104.875
Gen. Instrument	GIC	NYSE	24.25	56.50
GM (Hughes)	GMH	NYSE	25.50	39.00
Liberty Media	LBTYA	NASDAQ	25.50	29.125
Paramount	PCI	NASDAQ	45.125	77.75
Playboy	PLA	NYSE	7.25	13.00
Scientific Atlanta	SFA	NYSE	25.25	33.50
United Video	*UVSGA	NASDAQ	15.25	13.00
TCI	TCOMA	NASDAQ	20.875	30.25
Tee Comm	**TENXF	NASDAQ	0	3.00
Time Warner	TWX	NYSE	28.875	44.25
Turner	TBSA	ASE	21.375	27.25
Viacom	VIA	ASE	43.00	48.875
Westinghouse	WX	NYSE	13.875	14.125
Zenith	ZE	NYSE	6.00	7.00

* First price date 11/19/93

** Exchange Change - Amex has Bid/Ask only on 1/4/93

(UP CLOSE AND PERSONAL)

MEET THE CUSTOMERS

Find out who they are, where they are, what they buy and what they want — all in the SBCA's Bruskin/Goldring DTH customer study available for only \$1,000 (SBCA members) or \$1,500 (others). For more information, contact:

Margaret Parone

Satellite Broadcasting and Communications Association

225 Reinekers Lane, Suite 600

Alexandria, Virginia 22314-2875

Telephone: 703/549-6990 Fax: 703/549-7640

EQUIPMENT SALES:

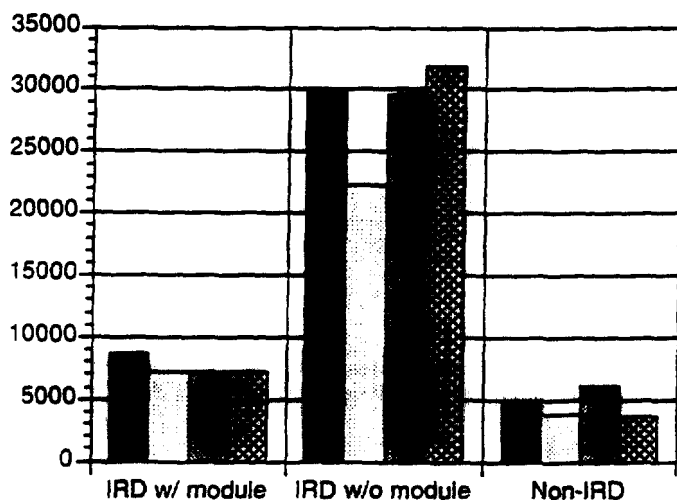
Receivers, Feedhorns & Antennas

Nearly fifteen equipment makers — a strong majority of the industry — contributed their data to the charts on these pages. As the figures show, in the latter third of 1993 (including projected figures for December), manufacturers sold some 163,000 receivers (mostly IRDs with-out modules) plus an approximate total of 234,000 feedhorns, primarily for C-band reception. While numbers for antennas are not listed because of a high degree of turnover in some parts of the industry, it's clear that 10 foot and 7 to 7.5 foot dishes still have the lion's share of the industry.

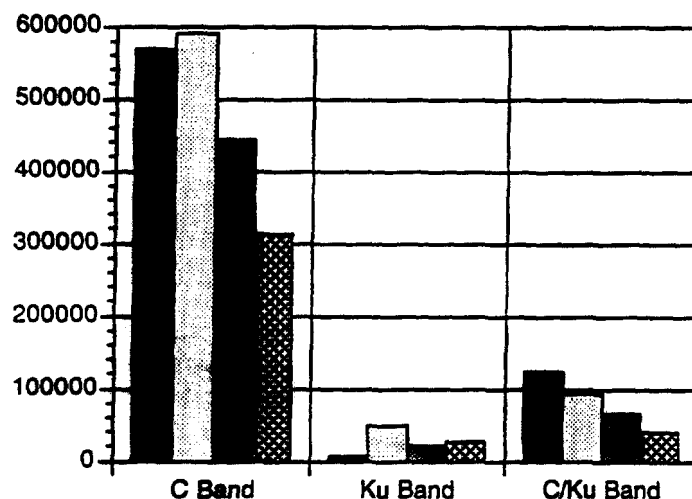
The strength of feedhorn sales (generally considered the most accurate predictor of new systems sold) reflects the overall strong position of the industry through '93 and the increased growth expected in '94.

Please Note: We intend these charts to be as useful as possible to all those interested and involved in the home satellite industry. Any comments or suggestions (even and especially criticisms) will be received gratefully! Please call Evie Haskell, Director of the SkyREPORT Project at 303/964-8400 or fax your comments to 303/964-8405.

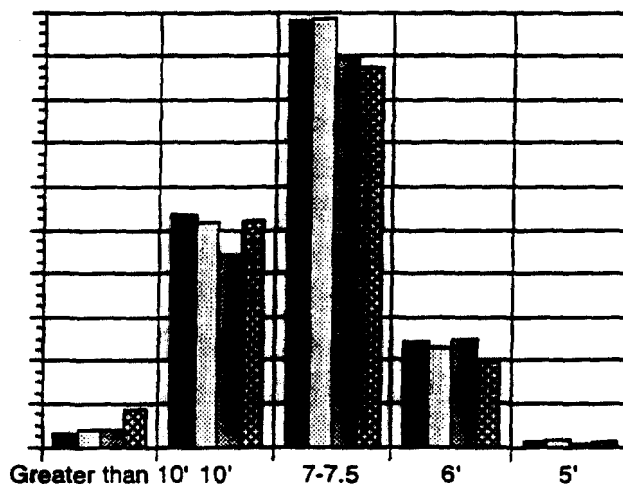
Receivers



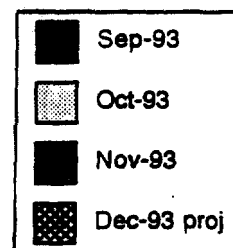
Feed Horns



Antennas



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1993 SBCA HOME SATELLITE DISH OWNER STUDY
Executive Summary

The 1993 SBCA Home Satellite Dish Owner Study probes the characteristics, motivations, and decision-making processes of current satellite dish owners. Designed and executed by Bruskin/Goldring, a recognized leader in consumer research, this study represents the first known large scale study of current home satellite dish owners to be based on a nationwide sample of consumers. Previous studies have been based on proprietary customer lists obtained from companies in the TVRO business.

Methodology and Sample

Telephone interviews were conducted with 1,009 current satellite dish owners between November 1-3, 1993. The sample of dish owner from which these interviews were conducted was derived from a recent national Shoppers Mail survey that included a question regarding ownership of a satellite dish system. The list of respondents who answered "yes" to that question was randomized by an "every nth name" procedure to generate the telephone calls.

Highlights

- The study implies that there are 3.5 million operable satellite dishes in the United States, consistent with other industry estimates.
- The major reasons for purchasing a satellite system are the variety of programming offered by satellite and issues relating to cable television,
 - The average cost to purchase and install a satellite system was reported to be \$2,300.
- Overall, dish owners are satisfied with their system, with over half (55%) indicating that they were very satisfied, and three out of four (78%) indicating that they were either very or somewhat satisfied with their satellite system.
 - Those who subscribe to satellite television programming are much more likely to be satisfied with their satellite system.
- Less than half (42%) of dish owners report subscribing to satellite television programming services.
 - The average amount spent on programming (excluding pay-per-view purchases) was \$281 per year for annual subscribers, and \$25.57 for monthly subscribers.
- One in five (21%) of all satellite system owners has purchased a pay-per-view event.
 - Those who do order PPV report that they purchase an average of 1.3 events and spend a self-reported average of \$25 per month.
- Overall, almost two thirds of dish owners reported having cable television service available to them, if they wished to subscribe.

- Of those who could subscribe to cable if they wanted to, over a third (37%) subscribe to some cable television service.
- Satellite television compares extremely favorable to cable television on most key measures.
- Over one third (36%) of dish owners report being aware of the term DBS (Direct Broadcast Satellite) on an unaided basis. Upon being read a brief description, over half (56%) reported having heard of DBS.
- Dish owners are much more likely to own other home theater consumer electronics equipment than the national average.
- As in other studies, satellite dish owners were found to be older, more educated, and more affluent than the average consumer.

Complete Study Results

The full study results are available to SBCA members for \$1,000, and to non-members for \$1,500. Those purchasing the full study will receive an in-depth 100+ page report, including over 60 pages of tables and full color charts, two binders of the detailed cross tabulation statistics (with more than 120 tables in each), and a data disk of the survey results. For more information, or to purchase the complete study, please contact Margaret Parone of the SBCA at (703) 549-6990.

1993 SBCA HOME SATELLITE DISH OWNER STUDY

Key Findings

NUMBER OF U.S. SATELLITE DISHES

- The study implies that there are 3.5 million operable satellite dishes in the United States.
 - Based on the proportion of respondents who indicated that they subscribed to satellite TV programming (42%), and the known number of active programming subscribers (1.5 million, as reported by General Instrument), the SBCA estimates that there are 3.5 million operable satellite dishes in the U.S. today.

SATELLITE SYSTEM PURCHASE DECISION

- The average cost to purchase and install a satellite system was reported to be \$2,300.
- The major reasons for purchasing a satellite system are the variety of programming offered by satellite and issues relating to cable television.

Reasons for Purchase

(multiple mentions, need not total 100%)

More programming variety	50%
Cable not available/poor rates or service	36%
Poor over-the-air	15%
Satellite has better reception/picture	2%
Other responses	9%

- Over two thirds acquired their satellite system through a local store or dealer.

Where bought Satellite System

Local store/dealer	67%
Friend/neighbor	8%
National chain (like Sears, Radio Shack)	7%
Came with the house	3%
Other/Don't know	15%

- Satellite dish owners first found out about satellite television primarily through friends (39%) or advertising (23%).

How First Found Out About Home Satellite Television

(multiple mentions, need not total 100%)

Friends	39%
Advertising	23%
Magazines	8%
Relative/family member	5%
Saw one and wanted it	3%
Came with the house	2%
Other	10%

DISH OWNER SATISFACTION

- Overall, dish owners are satisfied with their system, with over half (55%) indicating that they were very satisfied, and three out of four (78%) indicating that they were either very or somewhat satisfied with their satellite system.
 - A key indicator of overall satisfaction is the purchase of satellite television programming, with almost all (97%) of dish owners who subscribe to satellite television programming expressing satisfaction with their system, compared to only 64% of those who did not subscribe to programming.
 - Overall satisfaction was also found to be high among owners without cable available (81% satisfied), non-subscribers to cable TV (84% satisfied), and pay-per-view purchasers (87% satisfied).
- Satellite television compares extremely favorable to cable television on most key measures.

"Which is better, cable or satellite?"

	<u>Cable is better</u>	<u>Satellite is better</u>
Programming variety	14%	65%
Signal quality	15%	53%
Cost of programming	17%	50%
Customer service	23%	41%
Ease of operation	44%	30%

HARDWARE/SYSTEM SET-UP

- More than a third (36%) of dish owners reported having more than one TV connected to their satellite system.
 - In homes with more than one TV, the mean number of TV's connected to the satellite system was 1.7 TV's. However, satellite television programming subscribers reported an average of 2.0 TV's attached to their satellite dish, versus an average of 1.5 TV's for those who did not subscribe to programming.
 - A third (34%) of those with more than one TV hooked up to their satellite system reported having more than one receiver.
- Over half of dish owners (57%) still have their original receiver or IRD in operation, while slightly over a third (36%) have acquired a replacement or upgrade of this hardware.
 - Future receiver purchase interest is low. Likelihood to purchase a new receiver in the next twelve months in only 12% (with only 4% very likely).

SERVICE AND REPAIR ISSUES

- Most (83%) of dish owners reported having a satellite dealer.
 - Of those, most (56%) reported being very satisfied with their dealer, and three in four (77%) were either very or somewhat satisfied with their dealer.
- Although the majority of satellite dish owners are very satisfied with their systems, dish owners also related the problems they have with their system.

Common Problems with Satellite System (multiple mentions, need not total 100%)

Weather related problems	19%
Channels are scrambled	5%
Need to reprogram satellite location	4%
Descrambler module failure	3%
Receiver failure	3%
Dish arm failure	3%
Too complicated, hard to understand all features	2%
Need to re-hit programming	2%
All other responses	18%
No problems	9%
Don't know	39%

SUBSCRIPTION PROGRAMMING

- Less than half (42%) of dish owners report subscribing to satellite television programming services.
 - Non-subscribers cite not owning a descrambler (21%) and getting enough channels/variety already (20%) as the primary reasons for not purchasing programming.
- Most dish owners can clearly receive at least one of the major television broadcast network signals.

Local Network Signals Clearly Available (multiple mentions, need not total 100%)

ABC	78%
CBS	79%
NBC	78%
FOX	52%
PBS	51%

- Most subscribers (69%) purchase annual programming subscriptions.

Subscription Billing Cycle
(among those who subscribe)

Annual	69%
Monthly	25%
Don't know	6%

- The average amount spent on programming (excluding pay-per-view purchases) was \$281 per year for annual subscribers, and \$25.57 for monthly subscribers.
- Most subscribers (78%) purchase programming directly from the supplier.

Source of Programming Subscription
(among those who subscribe)
(multiple mentions, need not total 100%)

Directly from programming supplier	78%
Dealer	19%
Other	4%
Don't Know	3%

- Although seven in ten (70%) who purchase from a supplier buy from one supplier only, the average number of suppliers used is 1.5.
- Satellite TV guides are overwhelmingly mentioned as being the best source for information about programming packages.

Best Source for Programming Package Information
(among those who subscribe)
(multiple mentions, need not total 100%)

Satellite television guides	74%
Dealer	15%
Television advertising	12%
Direct mail	10%
Friend/word of mouth	9%

PAY-PER-VIEW PROGRAMMING

- Overall, one in five (21%) of all satellite system owners has purchased a pay-per-view event.
- Satellite television programming subscribers are much more likely to have purchased PPV programming.

Pay-Per-View Programming Purchasers

	<u>Overall</u>	<u>Satellite TV Programming</u>	
		<u>Subs</u>	<u>Non-Subs</u>
Have ever purchased PPV	21%	32%	14%
Have never purchased PPV	78%	68%	85%

- Those who have not purchased PPV cite that they are just not interested (46%) or that the cost is too expensive (20%) as reasons for not purchasing PPV.

- Those who do order PPV report that they purchase an average of 1.3 events and spend a self-reported average of \$25 per month.

CABLE TELEVISION

- Overall, almost two thirds of dish owners reported having cable television service available to them, if they wished to subscribe.

Availability of Cable

	<u>Overall</u>	<u>Satellite TV Programming</u>	
		<u>Subs</u>	<u>Non-Subs</u>
Cable available (total)	65%	58%	71%
-When dish bought	39%	35%	42%
-Currently (not when bought)	27%	23%	30%
Cable not available	35%	42%	29%

- Of those who could subscribe to cable if they wanted to, over a third (37%) subscribe to some cable television service.

Subscription to Cable (among those with cable TV available)

	<u>Overall</u>	<u>Satellite TV Programming</u>	
		<u>Subs</u>	<u>Non-Subs</u>
Subscribe to cable	37%	18%	49%
Do not subscribe to cable	63%	82%	51%

- Current cable subscribers gave a number of reasons for subscribing to cable, with the most common reason being to get their local television station.

Reasons for Subscribing to Cable (among those cable TV subscribers) (multiple mentions, need not total 100%)

	<u>Overall</u>	<u>Satellite TV Programming</u>	
		<u>Subs</u>	<u>Non-Subs</u>
To get local TV stations	26%	41%	22%
Viewing variety	14%	14%	14%
Too expensive to wire satellite system to other TV's	9%	9%	9%
Satellite system is broken	8%	2%	10%

VIOLENCE ON TELEVISION/PARENTAL LOCKOUT FEATURE

- Over two-thirds (67%) of those who subscribed to satellite television services were aware of the parental lockout feature that allows parents to control what programs or channels their children may watch.